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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/030,166

01/30/2002

Shigeru Watanabe

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11/16/2004

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EXAMINER

GOODWIN, JEANNE M

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,166	WATANABE ET AL.	
	Examiner	Art Unit	
	Jeanne-Marguerite Goodwin	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug. 12, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 9, 11 and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 12-16, 18, 20, 21 and 25 is/are rejected.
- 7) ☒ Claim(s) 10, 17, 19 and 25-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 1-7, 9, 11 & 22-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on Aug. 12, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 8, 12, 13 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,560,167 to Kotanagi [hereinafter Kotanagi '167].

Kotanagi '167 discloses a thermoelectric generator timepiece comprising a dial, a

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movement (116), a thermoelectric generator unit (120), a metal heat conduction plate (112) installed within a hermetically enclosed space defined by a case back (101) made of a metal-make back lid (heat conducting portion) (102) and a frame (103) formed of a heat insulating member, e.g., a resin material ABS or polycarbonate. In Fig. 1, the metal-make back lid (102) is formed in a shape larger in outer size than the thermoelectric unit (120) and disposed opposite the thermoelectric unit (120) and the heat insulating member (103) is formed so as to be disposed on the outside of the back lid (102). Furthermore, the heat insulating member (103) is provided with a sloped face gently slanting towards the outer periphery. Moreover, Kotanagi '167 discloses an upper protection sheet/heat radiating plate (111) and a lower protection sheet/heat absorbing plate (104) in contact with the movement and the case back, respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-16, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotanagi '167 in view of US Patent 6,359,841 to Kotanagi et al [hereinafter Kotanagi '841].

Kotanagi '167 discloses a device as stated above with regards to claims 12 and 13.

Kotanagi '167 discloses all the subject matter claimed by applicant with the exception of the limitation stated in claim 14, i.e., an elastic member disposed between the lower protection sheet

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and the case back; the limitation stated in claim 15, i.e., an elastic member disposed between the upper protection sheet and the movement; the limitation stated in claim 16, i.e., an elastic member disposed between the case and the heat conduction sheet; the limitation stated in claim 18, i.e., a spacer is disposed between the upper protection sheet and the movement; the limitation stated in claim 20, i.e., the elastic member is a compressible and heat conductive sheet having a high thermal conductivity; and the limitation stated in claim 21, i.e., wherein the spacer is made of a metallic material.

With respect to the limitation stated in claims 14-16, 18, 20 and 21: Kotanagi '841 discloses an elastic members/spacers (320, 244) formed of metal having a high thermal conductivity, wherein the elastic member (320) is disposed between a thermal conductive plate/lower protection sheet (120) and case back and the elastic member (244) is disposed between a thermal conductive plate/upper protection sheet (170) in order that heat can be transferred extremely efficiently from the thermal conductive plates (120; 170). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the elastic member/spacer, as taught by Kotanagi '841, to the timepiece of Kotanagi '167, in order to transfer the heat more efficiently as already suggested by Kotanagi '841.

Allowable Subject Matter

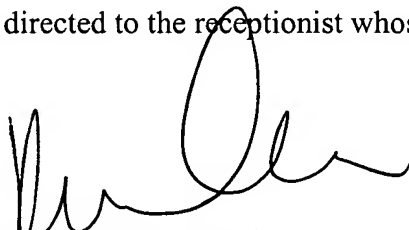
6. Claims 10, 17, 19 and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 disclose related devices. Mitamura '144 and '921, Tsubata, Martin et al., Kawata et al., Dolezal et al., Kawata and Matoge et al. disclose thermoelectric generator timepieces.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (571) 272-2104. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2861.

JMG
Nov. 10, 2004



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